

AMENDMENTS TO THE CLAIMS:

If entered, this listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (original) A method of using anti-code dosage as LDD implant to turn off a MOS transistor comprising the steps of:

providing a substrate having an NMOS region and a PMOS region;

forming a dielectric layer over said substrate, including over said NMOS and PMOS regions;

forming an NMOS gate electrode over said NMOS region and a PMOS gate electrode over said PMOS region over said dielectric layer formed over said NMOS and PMOS regions;

performing an N-type lightly doped drain (NLDD) implant over said NMOS region;

performing P-type lightly doped drain (PLDD) implant over said PMOS region;

performing a code implant over said NMOS region;

performing a code implant over said PMOS region; and

performing an anti-code LDD implant to turn off said MOS transistor.

2 - 36. (Cancel)

37. (New) The method according to claim 1, wherein said substrate is silicon.

38. (New) The method according to claim 1, wherein said dielectric layer is a gate oxide layer having a thickness between about 100 to 150 angstroms (Å).

39. (New) The method according to claim 1, wherein said NMOS and PMOS gate electrodes comprise a polysilicon layer having a thickness between about 1400 to 1600 Å, a tetraethyl orthosilicate (TEOS) layer having a thickness

between about 750 to 850 Å, and a tungsten silicide layer having a thickness between about 1000 to 1500 Å.

40. (New) The method according to claim 1, wherein said NMOS and PMOS gate electrodes comprise polycide which further comprises polysilicon having a thickness between about 1400 to 1600 Å and tungsten silicide having a thickness between about 1200 to 1300 Å.

41. (New) The method according to claim 1, wherein said performing an N-type lightly doped drain (NLDD) implant over said NMOS region is accomplished with As ions at a dosage level between about 4×10^{13} to 6×10^{13} atoms/cm³ and at an energy level between about 40 to 60 KeV.

42. (New) The method according to claim 1, wherein said performing P-type lightly doped drain (PLDD) implant over said PMOS region is accomplished with BF₂ ions at a dosage level between about 1.5×10^{13} to 2.0×10^{13} atoms/cm³ and at an energy level between about 20 to 40 KeV.

43. (New) The method according to claim 1, wherein said performing said code implant over uncovered said NMOS region is accomplished with BF₂ ions at a dosage level

between about 9×10^{13} to 1×10^{14} atoms/cm³ and at an energy level between about 35 to 45 KeV.

44. (New) The method according to claim 1, wherein said performing a code implant over said PMOS region is accomplished with P ions at a dosage level between about 6×10^{13} to 9×10^{13} atoms/cm³ and at an energy level between about 25 to 35 KeV.

45. (New) The method according to claim 1, wherein performing an anti-code LDD implant to turn off said MOS transistor is accomplished with BF₂ ions at a dosage level between about 4.0×10^{13} to 5.0×10^{13} atoms/cm³ and at an energy level between about 35 to 45 KeV.